

NO:3) and including an alteration of the naturally occurring L-lysine at position 91, L-threonine at position 95, or L-arginine at position 97, to another amino acid. In one aspect, the peptide analogue includes additional alteration of one to three L-amino acids at positions 86, 87, 88, 91, 95, 97, 98 and/or 99 of human myelin basic protein as long as 91 and 97 are not both altered in the same peptide analogue. In another aspect, the peptide analogue additionally has the N-terminal and C-terminal residues altered to an amino acid such that proteolysis is reduced upon administration to a patient compared to a peptide analogue without these additional alterations. In a further aspect, the peptide analogue of MBP comprises at least seven amino acids selected from residues 86-99 (SEQ ID NO:3) and has one of the residues at position 91, 95 or 97 altered to an amino acid not present in native MBP protein. In addition to such single alterations, one to three additional alterations of residues 86 to 99 may be made, as long as residues 91 and 97 are not altered in the same peptide analogue.

Please replace the paragraph beginning at page 8, line 27, with the following rewritten paragraph:

Peptide analogues within the present invention should (a) compete for the binding of MBP (87-99) (residues 87 to 99 of SEQ ID NO:2) to MHC; (b) not cause proliferation of an MBP (87-99)-reactive T cell line; and (c) inhibit induction of experimental allergic encephalomyelitis (EAE) by MBP (87-99) in rodents.

In the Claims:

Please cancel claims 1-29, 35-44, 47, and 51-72, without prejudice.

Please amend the claims to read as follows:

30. (Amended) A peptide analogue comprising at least seven consecutive amino acids selected from residues 86 to 99 of human myelin basic protein as recited in SEQ ID NO:3, including residue 91, wherein the L-lysine at position 91 is altered to another amino acid, and the N-terminal amino acid and or the C-terminal amino acid are altered to another